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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,051	04/26/2001	Masahiko Miyamoto	03409.0066	6514
22852	7590	02/18/2005		
			EXAMINER	
			PASSANITI, SEBASTIANO	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/842,051	MIYAMOTO, MASAHIKO	
	Examiner	Art Unit	
	Sebastiano Passaniti	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on see detailed Office action.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3,4,6 and 12-15 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3,4,6 and 12-15 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

This Office action is responsive to communication received 12/07/2004 – RCE and Amendment.

Claims 1, 3, 4, 6 and 12-15 remain pending.

Following is an action on the MERITS:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim in view of Thomson and Lawton. The patent to Yim shows a face surface (6) with an upper portion (8) and a lower portion (7) separated by an imaginary boundary line, said face surface being free of a face surface portion at the boundary line with the exception of the upper and lower portions, as required by claim 1. The upper and lower portions clearly contact one another at the boundary line, as required by claim 14. In addition, the upper and lower portions are in contact across the entire face surface (from heel to toe) at the boundary line, as required by claim 15. Yim notes that the continuity between the upper and lower portions enables the golfer to make the most use of the sweet spot area regardless of the type of stroke used (col. 2, lines 1-3 and col. 2, lines 45-61). Yim differs from the claimed invention in that Yim does not detail the specific roll radius for each of the upper portion. Note, insofar as the lower portion, Yim shows a flat or planar face and therefore meets the claimed limitation

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that the lower portion must have a roll radius of 310 mm or greater. Thomson shows a roll radius of at least a portion of the upper face section being about 0.700 inch, which meets the claimed limitation requiring a roll radius of 305 mm or less for the upper portion. Thomson recognizes that this roll radius creates a desirable soft feel to the golfer. See col. 2, line 61 through col. 3, line 6 in Thomson. In addition, Lawton shows a curved surface for the upper portion of a face section of a golf putter in which the radius is generally the same as the radius of a golf ball (7). Note, even though Lawton does not give a specific dimension for the roll radius, relying on the fact that the radius is described as being the same as the radius of a golf ball and considering that a USGA golf ball has a radius of 0.84 inch, it is clear that the roll radius for the upper portion of the face in Lawton likewise meets the claimed limitation of an upper portion having a roll radius of 305 mm or less. Lawton notes that the curvature of the face avoids "crowding" of the ball towards the ground. In other words, the ball will be allowed to overspin in an unobstructed manner. See page 1, col. 1, lines 14-16 and col. 2, lines 70-74 in Lawton. In view of the patents to Thomson and Lawton, it would have been obvious to modify the device in the cited art reference to Yim by shaping the roll radius (R32) with a roll radius of 305 mm or less, the motivation being to create desirable overspin.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yim in view of Thomson, Lawton and Reuter. Yim in view of Thomson and Lawton has been discussed above. To have further modified the device in the cited art reference to Yim by fabricating the putter with a hollow metal construction to help redistribute weight and to take advantage of convenient casting techniques for the manufacture of the head

would have been obvious in view of the patent to Reuter, which shows it to be old in the art to fabricate a club head putter as a hollow metal article in order to reduce the weight of the head. See col. 1, lines 48-60 in Reuter.

Claims 1, 3, 4, 6 and 12-15 are rejected over Werner in view of applicant's showing of prior art (labeled as Comparative Example 7 – Table 1, Page 9). Werner shows the underlying theme of applicant's claimed invention and includes a wood-type club head having a face divided into upper and lower portions, with the roll radius of the upper portion being less than the roll radius of the lower portion. Reference is made to Figure 8 in Werner and the discussion in column 9, lines 31-51, wherein Werner details that the lower part of the face defines a flattened portion (34), while the upper portion is defined by a curvature (roll). As a matter of simply referencing the manner in which Werner is most closely related to applicant's claimed invention, note that impact point (32) in the Werner patent would appear to correlate to point "SS" shown in applicant's Figure 1. Werner differs from the claimed invention in that Werner does not show the precise, claimed radii for the face, specifically a roll radius of 305 mm or less for the upper portion and a roll radius of between 310 mm or more for the lower portion. The applicant has provided a Comparative Example 7 that teaches an upper roll radius of 310 mm and a lower roll radius of 356. Though the applicant indicates the Comparative Example 7 had an insufficient effect despite having a compound curvature, the example nonetheless shows that the claimed upper and lower roll radii are well-known. In view of the prior art provided by the applicant, it would have been obvious to modify the device in the cited art reference to Werner by incorporating a roll radius of between 305

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mm or less for the upper portion and a roll radius of between 310 mm or more for the lower portion, the motivation being to desirably affect the trajectory of a struck ball. Further, the claimed, dimensional limitations are not deemed critical. Insofar as the claimed requirements that the club head include a hollow, metallic structure, note that Werner suggests, for example, that the club in Figure 7 is modeled after what is typically known as a "wood" and is more commonly made of metal (column 4, lines 56-57). Moreover, the teaching reference to Masghati obviates the use of hollow, metallic shell structure for the club head by noting that the use of "wood" and "wood-type" are not literally restricting, but may incorporate club heads shaped like traditional wooden club heads and alternatively made of metal, plastic and other materials (col. 6, lines 53-57).

#### RESPONSE TO ARGUMENTS

In the arguments received 12/07/2004, the applicant inquires about the date used by the Office to identify the receipt date of a response filed by the applicant with respect to a previous Office action. In addition, applicant presents arguments with respect to the prior art rejections.

In response, it is noted that the Office action of September 20, 2004 references a communication received 05/19/2004. This date of 05/19/2004 is simply the actual date that the response was physically received by the Office. The response per se further includes a statement that it (the response) is a copy of correspondence that was mailed to the U.S. Patent and Trademark Office on November 17, 2003. This copy was accepted as a timely response to the earlier Office action, mailed July 16, 2003. No further explanation is deemed necessary.

With respect to the prior art rejections, applicant's arguments with respect to claims 1, 3, 4, 6 and 12-15 have been considered but are moot in view of the new ground(s) of rejection. The new grounds of rejection were necessitated by applicant's amendment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-272-4413. The examiner can normally be reached on Mon-Fri (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 571-272-4415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sebastiano Passaniti  
Primary Examiner  
Art Unit 3711

S.Passaniti/sp  
February 17, 2005